
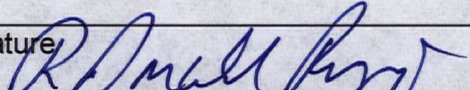


Superfund Property Reuse Evaluation Checklist for Reporting the Sitewide Ready for Anticipated Use GPRA Measure

Note: Upon issuance of the Guidance for Documenting and Reporting Performance in Achieving Land Revitalization (March 1, 2007), the Sitewide Ready-for-Reuse measure was renamed "Sitewide Ready for Anticipated Use" (Sitewide RAU).

	United States ENVIRONMENTAL PROTECTION AGENCY Washington, DC 20460		
	SUPERFUND PROPERTY REUSE EVALUATION CHECKLIST FOR REPORTING THE SITEWIDE READY FOR ANTICIPATED USE GPRA MEASURE Office of Superfund Remediation & Technology Innovation and Federal Facilities Restoration & Reuse Office		
PART A – GENERAL SITE INFORMATION			
1. Site Name : Sangamo Weston, Inc./Twelve-Mile Creek/Lake Hartwell PCB Contamination		2. EPA ID : SCD003354412	
3. Site ID : 0403252		4. RPM : CRAIG ZELLER	
5. Street Address : SANGAMO RD			
6. City : PICKENS		7. State : SC	8. Zip Code : 29671
9. Site Wide Ready for Anticipated Use Determination Requirements (all must be met for the entire construction complete site) <input checked="" type="checkbox"/> All cleanup goals in the Record(s) of Decision or other remedy decision document(s) have been achieved for any media that may affect current and reasonably anticipated future land uses, so that there are no unacceptable risks. <input checked="" type="checkbox"/> All institutional or other controls required in the Record(s) of Decision or other remedy decision document(s) have been put in place.			
PART B – SIGNATURE (Branch Chief or above should sign)			
NOTE: The outcome of this Property Reuse Evaluation does not have any legally binding effect and does not expressly or implicitly create, expand, or limit any legal rights, obligations, responsibilities, expectations, or benefits of any party. EPA assumes no responsibility for reuse activities and/or any potential harm that might result from reuse activities. EPA retains any and all rights and authorities it has, including but not limited to legal, equitable, or administrative rights. EPA specifically retains any and all rights and authorities it has to conduct, direct, oversee, and/or require environmental response actions in connection with the site, including but not limited to instances when new or additional information has been discovered regarding the contamination or conditions at the site that indicates that the response and/or the conditions at the site are no longer protective of human health or the environment.			
10. Name : R. Donald Rigger		11. Title/Organization : Chief, Restoration and Site Evaluation Branch	
12. Signature 		13. Date 6-APR-2015	

EPA Form 9100-4 (9-2004)



10989640

March 30, 2015

ROUTING AND TRANSMITTAL SLIP		
TO:	Initials	Date
1. William Denman, RSSB	WD	3/30/15
2. Craig Zeller, RSEB	CZ	3/31/15
3. Bilal Harris, OEA	BH	3/31/15
4. Kim Jones, OEA	KaJ	4/2/15
5. Yvonne Jones, RSEB	YJ	4/3/15
6. Don Rigger, RSEB	DR	4/6/15
7. William Denman, RSSB		
8.		

ACTION REQUESTED: Signature of the Sitewide Ready for Anticipated Use (SWRAU) Checklist for the Sangamo Weston, Inc./Twelve-Mile Creek/Lake Hartwell PCB Contamination Superfund site located in Pickens, South Carolina.

- In August 2014, EPA issued an Explanation of Significant Differences (ESD) for the site which required institutional controls in the form of new Declaration of Covenants and Restrictions as part of the soil and groundwater remedy for the Plant site and Breazeale Site which had been placed on the properties in June 2014.
- All IC's required have been put in place and the Sangamo Weston, Inc./Twelve-Mile Creek/Lake Hartwell PCB Contamination Superfund site now meets the SWRAU criteria.

FROM: William Denman, RPM/SWRAU Coordinator
Superfund Remedial Branch, ext. 28939

STATE OF SOUTH CAROLINA)
COUNTY OF PICKENS)

DECLARATION OF COVENANTS
AND RESTRICTIONS

DEED BOOK____, PAGE____

This Declaration of Covenants and Restrictions ("Declaration") is made on this 9 day of June, 2014 by Schlumberger Technology Corporation ("Declarant") and the South Carolina Department of Health and Environmental Control ("Department").

RECITALS

WHEREAS, this Declaration is entered into pursuant to S.C. Code § 44-56-200, *et seq.*;

WHEREAS, Schlumberger Industries, Inc. changed its name on or about January 13, 1998 and changed its name again on or about December 31, 2001. All three entities were at all relative times wholly-owned subsidiaries of Declarant. Since at least 2004, Declarant has been performing the obligations of Schlumberger Industries, Inc. as set forth in the Consent Decree for The Sangamo-Weston/Twelve Mile Creek/Lake Hartwell PCB Contamination Superfund Site; Operable Unit No. 1; Pickens County, South Carolina in *United States of America v. Schlumberger Industries, Inc.*, Civil Action No. 8:92-1097 21 (now GRA.), in United States District Court for the District of South Carolina, Anderson Division (the "Consent Decree") and, therefore, Declarant is the real party in interest;

WHEREAS, Declarant is the exclusive and sole owner in fee simple of the complete title in approximately 174.8 acres of real property known as the Sangamo-Weston, Inc./Twelve Mile Creek/Lake Hartwell PCB Contamination Superfund Site in Pickens County, South Carolina, and more particularly described in Exhibit A attached hereto and incorporated herein by reference (the "Property");

WHEREAS, the Property has been the subject of a remedial action pursuant to a Record of Decision ("ROD") issued on December 19, 1990, an Explanation of Significant Differences ("ESD1") issued on September 10, 1991, an Explanation of Significant Differences ("ESD2") issued on June 18, 1993, and a Record of Decision Amendment ("ROD Amendment") issued September 2009 under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. §§ 9601, *et seq.*;

WHEREAS, Declarant is responsible for conducting response actions at the Property with oversight by the U.S. Environmental Protection Agency ("EPA") pursuant to the Consent Decree and related documents;

WHEREAS, Declarant has agreed to impose certain restrictions on the manner in which the Property may be developed and used in the future pursuant to the Consent Decree;

WHEREAS, the Consent Decree requires Declarant to implement deed restrictions, commonly referred to as institutional controls, on the Property in accordance with the Consent Decree;

WHEREAS, the Consent Decree provides in part that EPA, and its authorized representatives and contractors, shall have access at all reasonable times to the Property to the extent access to the Property is controlled by Declarant; and

WHEREAS, it is the intention of Declarant that EPA is a third party beneficiary of such institutional controls and such institutional controls shall be enforceable by EPA, the Department, and their successor agencies.

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS that Declarant, as fee simple owner of the Property hereinabove described, hereby declares and covenants on behalf of itself, its successors and assigns that the Property described in Exhibit A shall be held, mortgaged, transferred, sold, conveyed, leased, occupied, and used subject to the following covenants and restrictions, which shall touch and concern and run with the title to the Property;

1. Declarant covenants for itself, its successors and assigns that the Property shall not be used for residential purposes, including single family or multi-family residences, child or adult care facilities, nursing home or assisted living facilities, and any type of educational purpose for children/young adults in grades kindergarten through twelfth grade without obtaining prior written approval from EPA, the Department or their successor agencies.

2. Declarant covenants for itself, its successors and assigns that groundwater beneath the Property shall not be used for any purpose until drinking water standards are met without obtaining prior written approval from EPA or their successor agencies.

3. Declarant covenants for itself, its successors and assigns that no activities shall be conducted on the Property that may interfere with the construction, operation, maintenance, monitoring, or efficacy of any components, structures, or improvements relating to the remedial action without obtaining written approval from EPA, the Department or their successor agencies.

4. Declarant covenants for itself, its successors and assigns to provide unrestricted access to EPA, the Department, their successor agencies and all other parties performing response actions under EPA's or the Department's oversight, to complete any work required by EPA, including work currently set forth in the Consent Decree and related documents, and to inspect and enforce this Declaration.

5. Declarant covenants for itself, its successors and assigns that the covenants and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant, its successors and assigns, including any future owners of the Property. Declarant and its successors and assigns, including any future owners of the Property. It is expressly agreed that the Department and EPA shall have the right to enforce these covenants and restrictions upon Declarant, its successors and assigns and any future owners of the Property. Declarant and its successors and assigns, including any future owners of the Property, shall include these

covenants and restrictions with all deeds, mortgages, plats, or other legal instruments used to convey any interest in the Property. (Failure to comply with this paragraph does not impair the validity or enforceability of these restrictions.)

NOTICE: This Property is Subject to Declaration of Covenants and Restrictions and any subsequent Amendments Recorded at _____.

6. Declarant shall record this Declaration with the Deed for Property and Plat Map in a timely fashion in the Office of Register of Deeds of Pickens County, South Carolina and shall re-record it at any time the Department may require to preserve its rights. Declarant shall pay all recording costs and taxes necessary to record this document in the public records. Declarant shall provide a filed stamped copy of same to the Department and EPA within sixty (60) days after recordation. The copy shall show the date and Book and Page number where the Declaration has been recorded. The contact person for EPA is Director, Superfund Division, EPA Region 4, 61 Forsyth Street SW, Atlanta, GA 30303-8960.

7. These covenants and restrictions run with the Property forever and may not be altered, amended, changed or repealed except by Declarant, its successors and assigns, including any future owners of the Property, and without prior written approval of EPA, the Department or their successor agencies.

8. Declarant, its successors and assigns, including any future owners of the Property, shall submit to the Department and EPA a statement of maintenance of the covenants and restrictions as set forth herein annually by May 31st of every year. This reporting requirement is the obligation of each owner of the Property, or a portion of the Property as of May 31st of each year. Once title to all or a portion of the Property has been conveyed by Declarant or any future owner, such predecessor of title shall no longer have any responsibility for submission of the Report with respect to the Property it previously owned. Declarant, its successors and assigns, including any future owners of the Property, shall provide the following notice in each Report:

"The Covenants and Restrictions applicable to this Property are being properly maintained, and no development or use which is inconsistent with the Declaration of Covenants and Restrictions has occurred since the date of the last annual report."

9. This Declaration shall remain in place until such time as the Department has made a written determination that the covenants and restrictions set forth herein are no longer necessary. The Department shall not consent to any such termination unless the requirements of the Consent Decree have been met.

10. EPA is not the recipient of a real property interest but is a third-party beneficiary of the Declaration and, as such, has the rights of enforcement.

11. This Declaration only applies to the Property expressly identified in Exhibit A and does not impair the Department's and EPA's authority with respect to the Property or other real property associated with the Property under the control of Declarant.

WHERE UPON I set my hand as of the date first above written in Sugar Land, Texas.

WITNESSES:

SCHLUMBERGER TECHNOLOGY
CORPORATION, Declarant

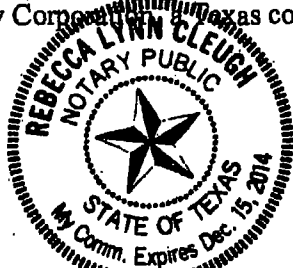
Sandra W. W. W.
[Signature]

By: [Signature]
Name: Virgilio Cocianni
Title: Remediation Manager

STATE OF TEXAS)
COUNTY OF FT. BEND)

ACKNOWLEDGEMENT

The foregoing instrument was acknowledged before me this 9 day of June, 2014, by Virgilio Cocianni, Remediation Manager of Schlumberger Technology Corporation, a Texas corporation, on behalf of the corporation.



[Signature]
Notary Public for Harris County, TX
My Commission Expires: Dec 15, 2014

IN WITNESS WHEREOF, the Department has caused this instrument to be executed as of the date first above written.

WITNESSES:

SOUTH CAROLINA DEPARTMENT OF
HEALTH AND ENVIRONMENTAL CONTROL

[Signature]
Chair HO

By: Daphne G. Neel
Daphne G. Neel, Chief
Bureau of Land and Waste Management
South Carolina Department of Health and
Environmental Control

STATE OF SOUTH CAROLINA

)

COUNTY OF RICHLAND

)

ACKNOWLEDGEMENT

I, VARONICA F Kennedy (Notary Public), do hereby certify that, Daphne G. Neel, Chief, Bureau of Land and Waste Management of the South Carolina Department of Health and Environmental Control, personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal this 1st day of October, 2014.

Varonica F Kennedy
Notary Public for South Carolina
My Commission Expires April 9, 2017

This Declaration is hereby approved by the United States Environmental Protection Agency as a third party beneficiary this 5th day of September, 2014.

UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY

By: Carol J. Monell for
Franklin E. Hill
Director
Superfund Division
U.S. Environmental Protection Agency,
Region 4

EXHIBIT A

Legal Description

All those pieces, parcels and tracts of land consisting of 60.34 acres, more or less, 3.78 acres, more or less, 3.67 acres, more or less, and 158.40 acres, more or less, respectively, situate, lying and being near the Town of Pickens, in the County of Pickens, State of South Carolina, and known and designated as Tracts Nos. 1, 2, 3 and 4, as shown on a plat entitled "Property of Pickens Realty Corporation, Pickens County, S. C.", made by Piedmont Engineering Service, Greenville, S. C., June 14, 1955, and recorded in the Office of the Clerk of Court for Pickens County in Plat Book 1920, at page 177, and having, according to said plat, the following metes and bounds:

TRACT NO. 1:

BEGINNING at an iron pin, corner of Tract 4, as shown on said plat (formerly Cureton property), and running thence with the line of said Tract 4, S. 45-50 E. 520 feet, more or less; thence continuing with the line of said Tract 4, N. 62-30 E. 363 feet; thence still with the line of said Tract 4, S. 22-30 E. 304 feet; thence still with the line of said tract 4, S. 54-30 W. 792 feet to the joint corner of Tracts 2 and 4, as shown on said plat; thence with the line of said Tract 2, S. 64-45 W. 728.5 feet to an iron pin in the center line of an electric power line; thence S. 64-43 W. 203 feet to an iron pin; thence S. 65-00 W. 201.9 feet to an iron pin; thence S. 65-00 W. 1223 feet to an iron pin; thence S. 62-18 W. 740 feet to an iron pin; thence N. 15-00 W. 824.5 feet to an iron pin; thence N. 72-08 E. 1574.3 feet to an iron pin; thence N. 53-10 E. 1653.5 feet to an iron pin, the point of beginning.

TRACT NO. 2:

BEGINNING at an iron pin in the center line of an electric power line in the line of Tract No. 4, as shown on said plat (formerly Cureton property), and running thence with the center line of said electric power line N. 82-27 W. 813.5 feet to an iron pin in the line of Tract No. 1, as shown on said plat (formerly Roark property); thence with the line of said Tract No. 1, N. 64-45 E. 728.5 feet to the corner of said Tract No. 4; thence with the line of said Tract No. 4, S. 19-26 E. 442.9 feet to an iron pin, the point of beginning.

TRACT NO. 3:

BEGINNING at an iron pin in the line of Tract No. 4, as shown on said plat (formerly Cureton property), and running thence S. 73-52 E. 100 feet, more or less, to a point in the center of Reece's Mill Pond on Town Creek; thence up said creek with the center line of said mill pond, in a Southeasterly direction, 900 feet, more or less, to a point in the line of property of Manual P. Reece; thence with the line of property of Manual P. Reece, N. 55-00 E. 145 feet to an iron pin, corner of said Tract No. 4; thence with the line of said Tract No. 4, N. 40-24 W. 935.9 feet to an iron pin; thence continuing with the line of said Tract No. 4, S. 39-30 W. 296.9 feet to an iron pin, the point of beginning.

TRACT NO. 4:

BEGINNING at an iron pin corner of Tract 1, as shown on said plat (formerly Roark property), and running thence N. 63-11 E. 1538.2 feet to an iron pin; thence N. 86-13 E. 377.3 feet to an iron pin; thence S. 30-51 E. 718.4 feet to an iron pin in the center of a county road; thence with the center line of said road, N. 52-24 E. 296.3 feet; thence continuing with the center line of said road, N. 43-36 E. 289.5 feet to an iron pin in the intersection of said county road with another county road; thence with the center line of said last mentioned county road, S. 17-32 E. 332.9 feet, S. 2-49 E. 274.2 feet, S. 14-03 E. 193.7 feet, S. 32-01 E. 242.3 feet, S. 39-18 E. 186.2 feet, S. 51-34 E. 288.9 feet, S. 15-11 E. 262.3 feet, S. 18-47 W. 160.2 feet, S. 1-55 E. 126.4 feet, S. 59-30 E. 149.1 feet, S. 72-10 E. 263.3 feet, S. 65-26 E. 545.2 feet, S. 76-08 E. 142.3 feet, N. 70-31 E. 274.7 feet; thence leaving said county road, S. 18-45 E. 415.3 feet to a point in the center of Town Creek; thence down the center line of said creek and following the meanders thereof along a traverse line, N. 30-50 W. 293.6 feet, S. 83-28 W. 480.7 feet, N. 56-43 W. 586.8 feet, N. 67-39 W. 491.3 feet, N. 88-44 W. 196.9 feet, S. 26-47 W. 238.7 feet, S. 7-33 W. 235.5 feet to an iron pin, which iron pin is S. 62-00 W. 26 feet from the center of Town Creek; thence from the center of Town Creek S. 62-00 W. 718.6 feet to an iron pin; thence S. 61-30 W. 105.2 feet to an iron pin corner of Tract 3, as shown on said plat; thence with the line of said Tract 3, N. 40-24 W. 935.9 feet to an iron pin; thence continuing with the line of said Tract 3, S. 39-30 W. 363 feet to an iron pin; thence S. 33-09 W. 796.4 feet to a point in the center of Town Creek; thence N. 17-54 W. 1193.9 feet to an iron pin corner of Tract 2, as shown on said plat; thence with the line of said Tract 2, N. 19-26 W. 442.9 feet to a corner of Tract 1, as shown on said plat; thence with the line of said Tract 1, N. 54-30 E. 792 feet; thence continuing with the line of said Tract 1, N. 22-30 W. 304 feet; thence still with the line of said Tract 1, S. 62-30 W. 363 feet; thence still with the line of said Tract 1, N. 45-50 W. 520 feet, more or less, to an iron pin, the point of beginning.

TOGETHER with a perpetual easement appurtenant to the above-described Tract Nos. 1 and 4 for the purpose of constructing, maintaining, and operating a railroad spur track on or across property owned by John D. Vickery, Jr., Ben Looper, Cleo Holiday, B. D. Aker and W. G. Acker (on June 25, 1955) adjoining the above-described property, with the right to make and maintain such cuts and fills as the grantee herein may deem necessary in the construction, maintenance and operation of said tract. The track to be constructed hereunder shall be in approximately and same location as shown on the plat hereinabove referred to, and the width of the easement hereby granted shall not exceed 50 feet on each side of the center line of said track as the same shall be constructed.

TOGETHER with a perpetual right and easement appurtenant to the above-described Tract No. 3 for the entire width of Town Creek and Reece's Mill Pond, to empty into said creek and mill pond at any point within the boundaries of Tract No. 3, any and all effluents from the industrial plant upon property of the grantee.

TOGETHER with a perpetual right and easement to conduct (in an open ditch if deemed necessary by the grantee), across land owned by A. G. Reece (on June 25, 1955) lying Southwest of Reece Mill Road and bounded by said road, Town Creek and Tract No. 4, as shown on the aforementioned plat, and to empty into Town Creek any and all effluents from said industrial

plant at any point between the bridge crossing Town Creek on Reese Mill Road and said Tract No. 4.

All of the above tracts being the same property conveyed by Pickens Realty Corporation to Sangamo Electric Company, by deed dated March 26, 1956 and recorded in the Register of Deeds Office for Pickens County on March 29, 1956 in Deed Book 8-G at Page 168.

LESS, HOWEVER:

All that certain piece, parcel or tract of land lying and being situate in the State of South Carolina, County of Pickens, located approximately 0.5 miles north of Pickens, South Carolina, and containing 9.0 acres, more or less, according to plat of T. Craig Keith, Surveyor, dated January 8, 1971, reference to which is hereby made for a more complete and accurate description and being thereon more fully described as follows, to-wit:

BEGINNING at a point on Town Creek, which point is common corner with S. C. National Bank property; running thence with Town Creek N. 87 W. 260 feet; thence N. 79 W. 275 feet; thence N. 75 W. 323 feet; thence N. 43 W. 100 feet; thence S. 89 W. 105 feet; thence N. 22 W. 150 feet; thence N. 43 W. 185 feet; thence N. 47-30 W. 97 feet; thence N. 66 W. 95 feet; thence N. 67 W. 72 feet to a point; thence leaving Town Creek and running N. 36-30 E. 103 feet to point on paved road; thence with paved road S. 68-30 E. 425 feet; thence S. 64-30 E. 575 feet; thence S. 84-30 E. 125 feet; thence N. 70 E. 241 feet to point; thence leaving paved road and running S. 17-30 E. 365 feet to point of beginning.

Being the same property conveyed by Sangamo Electric Company to Town of Pickens, by deed dated March 24, 1971 and recorded in the Register of Deeds Office for Pickens County in Deed Book 12-I at Page 149.

LESS, ALSO:

All that certain piece, parcel or lot of land lying and being situate in the State of South Carolina, County of Pickens, on Sangamo Road and Homestead Road and being shown and identified as Tract "A", containing 42.39 acres, more or less, on a plat prepared by C.E. Shehan, Surveyor, dated July 12, 1996, recorded in Plat Book 351, Page 11, in the Register of Deeds Office for Pickens County, South Carolina, reference to which is hereby made for a more complete and accurate description.

Being the same property conveyed by Schlumberger Industries, Inc. to Pickens Youth Athletic Corporation, by deed dated March 1, 1999 and recorded in the Register of Deeds Office for Pickens County on June 22, 1999 in Deed Book 490 at Page 327.

TMS Nos.: 4181-06-28-7243, 4181-06-37-9537, 4181-06-38-5628



Explanation of Significant Differences Sangamo Weston/Twelve Mile Creek/Lake Hartwell PCB Contamination Superfund Site Operable Unit One (OU1)

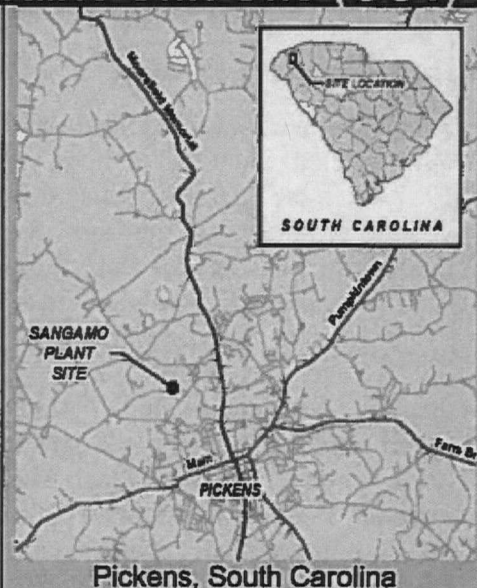
Site Name: Sangamo Weston/Twelve Mile Creek/Lake Hartwell PCB Contamination Superfund Site; Operable Unit 1 (OU1)

CERCLA ID #: SCD003354412

Site Location: Pickens, Pickens County, South Carolina

Support Agency: South Carolina Department of Health and Environmental Control

Lead Agency: EPA, Region 4



I. Introduction

This decision document presents an Explanation of Significant Differences (ESD) for the Sangamo Weston/Twelve Mile Creek/Lake Hartwell PCB Contamination – Operable Unit One (OU1) Superfund Site (Sangamo Site), located in Pickens, South Carolina. The Record of Decision (ROD) addressed by this ESD is:

ROD for OU1 – Issued December 19, 1990.

The ESD is issued in accordance with § 117(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. § 9601 et seq., as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), § 300.435(c)(2)(i). The Director of the Superfund Division has been delegated the authority to sign this ESD.

This ESD will become part of the Administrative Record for the Sangamo Site (NCP 300.825(a)(2)), which has been developed in accordance with § 113 (k) of CERCLA, 42 U.S.C. § 9613 (k). The Administrative Record is available for review at the RM Cooper Library in Clemson, SC, the Pickens County Library in Easley, SC, and at U.S. EPA Region 4 Office in Atlanta, GA.

II. Statement of Purpose

Since the ROD finalization date, issues concerning institutional controls have been identified at the Sangamo Site.

The purpose of this ESD is to document a final decision to implement institutional controls in the form of new Declaration of Covenants and Restrictions as part of the soil and groundwater remedy for the Plant Site and Breazeale Site. In general, the new Declaration of Covenants and Restrictions prohibit residential land development and groundwater use at the Plant Site and Breazeale Site.

EPA prepares an ESD when it is determined by the Agency that changes to the original selected remedy are significant, but do not fundamentally alter the remedy selected in the ROD with respect to scope, performance, or cost.

III. Site History and Contamination

Sangamo Weston manufactured capacitors and other related electrical components from 1955 to 1987 when the business was sold. The plant used a variety of dielectric fluids in the manufacturing processes that contained Polychlorinated Biphenyls (PCBs). Industrial solvents were also used in manufacturing that contained Tetrachloroethylene (PCE) and Trichloroethylene (TCE). Waste disposal practices included land burial of off-specification capacitors and wastewater treatment sludge on the 220-acre Plant Site and 6 satellite disposal areas. It is estimated that approximately 400,000 lbs of PCBs were discharged as effluent from the wastewater treatment plant to Town Creek. Town Creek is a tributary of Twelve Mile Creek, which in turn is a major tributary of Lake Hartwell.

The Sangamo Site was divided into two Operable Units (OUs). OU1 addresses the land based disposal sites including the Plant Site and 6 satellite disposal areas. OU2 addresses the sediment, surface water, and biological migration pathways downstream from the land-based source areas.

The Sangamo Site was proposed to the National Priorities List (NPL) in January 1987, and became Final on the NPL in February 1990. Schlumberger, the Potentially Responsible Party (PRP), conducted a Remedial Investigation/Feasibility Study (RI/FS) for OU1 pursuant to the terms of a June 1987 Administrative Order on Consent (AOC) with EPA. The Record of Decision (ROD) for OU1 was issued by EPA in December 1990. Schlumberger conducted the Remedial Design/Remedial Action (RD/RA) for OU1 pursuant to the terms of an April 1992 Consent Decree with EPA.

The contaminants found at OU1 and OU2 were principally PCBs and chlorinated solvents. Some or

all of the contaminants identified are hazardous substances as defined in § 104(14) of CERCLA, 42, U.S.C. § 9601(14), and 40 C.F.R. § 302.4.

IV. Selected Remedy

The ROD for OU1 was signed on December 19, 1990. Two previous ESDs have been issued for OU1. An ESD was issued in 1991 that modified the ROD by adding cleanup criteria for metals in soils and groundwater. An ESD was issued in 1993 to update the groundwater cleanup criteria for metals, and clarify PCB storage requirements.

The selected remedy in the ROD generally included:

- Excavation of soils at the satellite sites with concentrations ≥ 10 mg/kg;
- Excavation of soils at the Plant Site with concentrations ≥ 25 mg/kg;
- Consolidation of excavated soils at the Plant Site for treatment via thermal desorption;
- Thermal desorption of excavated soils to ≤ 2 mg/kg with backfill of treated material on the Plant Site;
- Groundwater recovery and treatment at the Plant Site and Breazeale Site; and
- Groundwater monitoring at the Cross Roads Site;

Excavation of soils at the satellite sites occurred between November 1993 and July 1994. Excavation of soils at the Plant Site occurred between July 1995 and May 1997. Approximately 60,000 tons of soil were thermally treated at the Plant Site from December 1995 to May 1997. The Sangamo Site achieved construction completion status in August 1999.

The Breazeale Site groundwater recovery and treatment system started up in June 1997 and operated until 2009 when it was shut down in favor for additional treatment via In-Situ Chemical Oxidation (e.g. per September 29, 2009 ROD Amendment). The Plant Site groundwater recovery and treatment system was started up in November

1998 and continues to operate. The Plant Site system was completely refurbished in 2013.

In September 1998, the Nix, Welborn and Trotter satellite sites were deleted from the NPL. The Dodgens satellite site was later deleted from the NPL in January 2002.

V. Description of Significant Differences and Basis for the ESD

Institutional controls in the form of Declaration of Covenants and Restrictions must be implemented at the Sangamo Site because the remedial action results in hazardous substances, pollutants, or contaminants remaining at the Site above levels that allow for unlimited use and unrestricted exposure to soil and groundwater. The remedial action provided in the ROD does not include institutional controls for soils and groundwater. As a result, an explanation of significant differences is needed to implement institutional controls in the form of Declaration of Covenants and Restrictions as part of the soil and groundwater remedy for the Site. The new institutional controls adopted by this ESD for the Plant Site and Breazeale Site are the following:

- The property will not be used for residential purposes;
- Groundwater beneath the property will not be used until drinking water standards are met;
- No activities will be conducted on the property that interfere with actions related to the remedial action;
- The EPA, the South Carolina Department of Health and Environmental Control (SCDHEC) and all other parties performing response actions will be provided unrestricted access to the Site;
- An annual statement will be submitted to EPA and SCDHEC regarding the maintenance of the covenants and restrictions; and
- The covenants and restrictions shall run with the title to the property and shall remain in

place until SCDHEC has determined that the covenants and restriction are no longer necessary.

VI. Support Agency Comments

EPA consulted with the SCDHEC and provided it the opportunity to comment on this ESD in accordance with NCP § 300.435 (c)(2) and § 300.435 (c)(2)(i) and CERCLA § 121(f). SCDHEC concurred with this ESD in a letter dated July 29, 2014.

VII. Statutory Determinations

EPA has determined that these significant changes comply with the statutory requirements of CERCLA § 121, 42 U.S.C. § 9621, are protective of human health and the environment, comply with Federal and State requirements that are applicable or relevant and appropriate to the remedial action, are cost-effective, and utilize permanent solutions and alternative treatment technologies to the maximum extent practicable.

Because this remedy will result in hazardous substances, pollutants, or contaminants remaining on site above levels that allow for unlimited use and unrestricted exposure, a statutory review will be conducted no less often than each five years after the initiation of the remedial action to ensure that the remedy is, or will be, protective of human health and the environment.

VIII. Public Participation

The public participation requirements set out in the NCP § 300.435(c)(2) have been met by publishing this ESD, making it available to the public in the Administrative Record, and publishing a notice summarizing the ESD in a major local newspaper.

IX. Authorizing Signature

I have determined the remedy for the Sangamo Site, as modified by this ESD, is protective of human health and the environment, and will remain so provided the actions presented in this report are implemented as described above.

This ESD documents the significant changes related to the remedy at the Sangamo Site. U.S. EPA selected these changes with the concurrence of SCDHEC.

U.S. Environmental Protection Agency

By: 

Randall Chaffins, Acting Director
Superfund Division

Date: 8/18/14